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Sequence Listing was accepted.

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217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Wed Jun 27 16:41:08 EDT 2007

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Application No: 10551004 Version No: 1.0

**Input Set:**

**Output Set:**

**Started:** 2007-06-27 12:08:32.799  
**Finished:** 2007-06-27 12:08:35.197  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 398 ms  
**Total Warnings:** 63  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 82  
**Actual SeqID Count:** 82

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**Started:** 2007-06-27 12:08:32.799  
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**Actual SeqID Count:** 82

Error code	Error Description
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SEQUENCE LISTING

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<120> Improved FC Fusion Proteins

<130> 31098PWO-HC

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<141> 2007-06-27

<150> PCT/EP2004/003239

<151> 2004-03-26

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<160> 82

<170> PatentIn Ver. 2.1

<210> 1

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: PCR primer  
for the amplification of CD95 cDNA

<220>

<223> Sense huCD95-Hind III

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tataaagctt gccaccatgc tgggcattctg 30

<210> 2

<211> 27

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<213> Artificial Sequence

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the amplification of CD95 cDNA

<220>

<223> Antisense huCD95-BgI II

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<210> 3

<211> 30

<212> DNA

<213> Artificial Sequence

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for the amplification of IgG1 Fc cDNA

<220>  
<223> Sense hulgG1Fc-BgIII

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<212> DNA  
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<223> Description of Artificial Sequence: PCR primer for  
the amplification of IgG1 Fc cDNA

<220>  
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the changing the Kozak Sequence from GCCACCATGC to  
GCCGCCACCATGG

<220>  
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tataaagctt gccgccacca tggtgccat c 31

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for the changing the Kozak Sequence from  
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<220>  
<223> Sense\_hulgG1

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<210> 8  
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<212> DNA  
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<220>  
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<220>  
<223> Antisense\_ERIhulgG1

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tatagaattc tcatttaccc ggagacaggg 30

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<223> Description of Artificial Sequence: primer used to amplify the cDNA of TRAILR2 domain

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tataaagctt gccgccccacca tggaacaacg gggacagaac 40

<210> 10  
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<212> DNA  
<213> Artificial Sequence  
  
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<220>  
<223> Antisense\_TRAILR2

<400> 10  
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<223> Description of Artificial Sequence: primer for PCR used to utilize fragments for cloning purposes

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tataaagctt gccgccccacca tggaacaacg gggacagaac 40

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<220>  
<223> Description of Artificial Sequence: primer for PCR used to utilize fragments for cloning purposes

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<210> 13  
<211> 335  
<212> PRT  
<213> human  
  
<220>  
<223> CD95 >sp/P25445/TNR6\_HUMAN Tumor necrosis factor receptor superfamily 6 precursor (FASL-receptor) (Apoptosis-mediating surface antigen FAS) (Apo-1 antigen) (CD95) - Homo sapiens (Human)

<400> 13

Met Leu Gly Ile Trp Thr Leu Leu Pro Leu Val Leu Thr Ser Val Ala  
1 5 10 15

Arg Leu Ser Ser Lys Ser Val Asn Ala Gln Val Thr Asp Ile Asn Ser  
20 25 30

Lys Gly Leu Glu Leu Arg Lys Thr Val Thr Val Glu Thr Gln Asn  
35 40 45

Leu Glu Gly Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro  
50 55 60

Pro Gly Glu Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro  
65 70 75 80

Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His  
85 90 95

Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly  
100 105 110

Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg  
115 120 125

Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp  
130 135 140

Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr  
145 150 155 160

Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn Leu Gly Trp  
165 170 175

Leu Cys Leu Leu Leu Pro Ile Pro Leu Ile Val Trp Val Lys Arg  
180 185 190

Lys Glu Val Gln Lys Thr Cys Arg Lys His Arg Lys Glu Asn Gln Gly  
195 200 205

Ser His Glu Ser Pro Thr Leu Asn Pro Glu Thr Val Ala Ile Asn Leu  
210 215 220

Ser Asp Val Asp Leu Ser Lys Tyr Ile Thr Thr Ile Ala Gly Val Met  
225 230 235 240

Thr Leu Ser Gln Val Lys Gly Phe Val Arg Lys Asn Gly Val Asn Glu  
245 250 255

Ala Lys Ile Asp Glu Ile Lys Asn Asp Asn Val Gln Asp Thr Ala Glu  
260 265 270

Gln Lys Val Gln Leu Leu Arg Asn Trp His Gln Leu His Gly Lys Lys  
275 280 285

Glu Ala Tyr Asp Thr Leu Ile Lys Asp Leu Lys Lys Ala Asn Leu Cys

290 295 300

Thr Leu Ala Glu Lys Ile Gln Thr Ile Ile Leu Lys Asp Ile Thr Ser  
305 310 315 320

Asp Ser Glu Asn Ser Asn Phe Arg Asn Glu Ile Gln Ser Leu Val  
325 330 335

<210> 14

<211> 330

<212> PRT

<213> human

<220>

<223> IgG1 > sp/P01857/GC1\_HUMAN Ig gamma-1 chain C  
region - Homo sapiens (Human)

<400> 14

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys  
1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr  
20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser  
35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser  
50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Leu Gly Thr Gln Thr  
65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys  
85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys  
100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro  
115 120 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys  
130 135 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp  
145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu  
165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu  
180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn

195

200

205

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly  
210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu  
225 230 235 240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr  
245 250 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn  
260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe  
275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn  
290 295 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr  
305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
325 330

<210> 15

<211> 400

<212> PRT

<213> Artificial Sequence

<220>

<221> MUTAGEN

<222> (1) .. (400)

<223> CD95-Fc fusion protein (AA 1-172 CD95 and AA  
102-330 IgG1)

<220>

<223> Description of Artificial Sequence: fusion protein

<400> 15

Met Leu Gly Ile Trp Thr Leu Leu Pro Leu Val Leu Thr Ser Val Ala  
1 5 10 15

Arg Leu Ser Ser Lys Ser Val Asn Ala Gln Val Thr Asp Ile Asn Ser  
20 25 30

Lys Gly Leu Glu Leu Arg Lys Thr Val Thr Val Glu Thr Gln Asn  
35 40 45

Leu Glu Gly Leu His His Asp Gly Gln Phe Cys His Lys Pro Cys Pro  
50 55 60

Pro Gly Glu Arg Lys Ala Arg Asp Cys Thr Val Asn Gly Asp Glu Pro  
65 70 75 80

Asp Cys Val Pro Cys Gln Glu Gly Lys Glu Tyr Thr Asp Lys Ala His  
85 90 95

Phe Ser Ser Lys Cys Arg Arg Cys Arg Leu Cys Asp Glu Gly His Gly  
100 105 110

Leu Glu Val Glu Ile Asn Cys Thr Arg Thr Gln Asn Thr Lys Cys Arg  
115 120 125

Cys Lys Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp  
130 135 140

Pro Cys Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr  
145 150 155 160

Ser Asn Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Cys Asp Lys Thr  
165 170 175

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser  
180 185 190

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg  
195 200 205

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro  
210 215 220

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala  
225 230 235 240

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val  
245 250 255

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr  
260 265 270

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr  
275 280 285

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu  
290 295 300

Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys  
305 310 315 320

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser  
325 330 335

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp  
340 345 350

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser  
355 360 365

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala  
370 375 380

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
385 390 395 400

<210> 16  
<211> 43  
<212> PRT  
<213> human

<220>  
<223> CD95 extracellular domain (AA 131-173)

<400> 16  
Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp Pro Cys  
1 5 10 15

Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr Ser Asn  
20 25 30

Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Asn  
35 40

<210> 17  
<211> 22  
<212> PRT  
<213> human

<220>  
<223> huIgG1 (AA 99-120)

<400> 17  
Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala  
1 5 10 15

Pro Glu Leu Leu Gly Gly  
20

<210> 18  
<211> 60  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> CD95-Fc fusion protein of CD95 extracellular domain (AA 131-173) and huIgG1 (AA 99-120) with an overlapping amino acid (CD95 AA 172 and huIgG1 AA 102)

<220>

<223> Description of Artificial Sequence: fusion  
protein

<400> 18

Pro Asn Phe Phe Cys Asn Ser Thr Val Cys Glu His Cys Asp Pro Cys  
1 5 10 15

Thr Lys Cys Glu His Gly Ile Ile Lys Glu Cys Thr Leu Thr Ser Asn  
20 25 30

Thr Lys Cys Lys Glu Glu Gly Ser Arg Ser Cys Asp Lys Thr His Thr  
35 40 45

Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly  
50 55 60

<210> 19

<211> 468

<212> PRT

<213> human

<220>

<223> TRAIL-R1 >sp/000220/T10A\_HUMAN Tumor necrosis  
factor receptor superfamily member 10A precursor  
(Death receptor 4) (TNF-related  
apoptosis-including ligand receptor 1) (TRAIL  
receptor-1) (TRAIL-R1)

<400> 19

Met Ala Pro Pro Pro Ala Arg Val His Leu Gly Ala Phe Leu Ala Val  
1 5 10 15

Thr Pro Asn Pro Gly Ser Ala Ala Ser Gly Thr Glu Ala Ala Ala Ala  
20 25 30

Thr Pro Ser Lys Val Trp Gly Ser Ser Ala Gly Arg Ile Glu Pro Arg  
35 40 45

Gly Gly Gly Arg Gly Ala Leu Pro Thr Ser Met Gly Gln His Gly Pro  
50 55 60

Ser Ala Arg Ala Arg Ala Gly Arg Ala Pro Gly Pro Arg Pro Ala Arg  
65 70 75 80

Glu Ala Ser Pro Arg Leu Arg Val His Lys Thr Phe Lys Phe Val Val  
85 90 95

Val Gly Val Leu Leu Gln Val Val Pro Ser Ser Ala Ala Thr Ile Lys  
100 105 110

Leu His Asp Gln Ser Ile Gly Thr Gln Gln Trp Glu His Ser Pro Leu  
115 120 125

Gly Glu Leu Cys Pro Pro Gly Ser His Arg Ser Glu His Pro Gly Ala

130 135 140  
Cys Asn Arg Cys Thr Glu Gly Val Gly Tyr Thr Asn Ala Ser Asn Asn  
145 150 155 160  
Leu Phe Ala Cys Leu Pro Cys Thr Ala Cys Lys Ser Asp Glu Glu  
165 170 175  
Arg Ser Pro Cys Thr Thr Arg Asn Thr Ala Cys Gln Cys Lys Pro  
180 185 190  
Gly Thr Phe Arg Asn Asp Asn Ser Ala Glu Met Cys Arg Lys Cys Ser  
195 200 205  
Arg Gly Cys Pro Arg Gly Met Val Lys Val Lys Asp Cys Thr Pro Trp  
210 215 220  
Ser Asp Ile Glu Cys Val His Lys Glu Ser Gly Asn Gly His Asn Ile  
225 230 235 240  
Trp Val Ile Leu Val Val Th